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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	. ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,644	11/21/2003	Kunio Yoneno	244896US2CONT	9150
22850 7	10/06/2006		EXAM	INÉR
C. IRVIN MCCLELLAND			SHERMAN, STEPHEN G	
OBLON, SPIV	'AK, MCCLELLAND, M			
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			2629	

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/717,644	YONENO, KUNIO				
Office Action Summary	Examiner	Art Unit				
	Stephen G. Sherman	2629				
The MAILING DATE of this communication app Period for Reply	1	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL	Y IS SET TO EXPIRE 2 MONTH	S) OR THIRTY (30) DAYS				
WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailling date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on <u>06 S</u>	eptember 2006.					
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
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closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 27,46 and 69 is/are pending in the ap	4)⊠ Claim(s) <u>27,46 and 69</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>69</u> is/are allowed.						
6)⊠ Claim(s) <u>27 and 46</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/c	or election requirement.					
Application Papers						
9) The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>21 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119		•				
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:						
 Certified copies of the priority documents have been received. 						
2. Certified copies of the priority document	• •					
3. Copies of the certified copies of the prior	·	ed in this National Stage				
application from the International Burea	• • • • • • • • • • • • • • • • • • • •					
* See the attached detailed Office action for a list	or the certified copies not receive	ea.				
Attachment(s)	0 🗆	(DTO 442)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D	ate				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) Other:						

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DETAILED ACTION

1. This office action is in response to the amendment filed the 6 September 2006. Claims 27, 46 and 69 are pending. Claims 1-26, 28-45 and 47-68 remain cancelled.

Terminal Disclaimer

2. The terminal disclaimer filed on the 6 September 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 6,731,343 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.

- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 27 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onagawa (US 5,657,089) in view of Yoshioka (US 4,998,169).

Regarding claim 27, Onagawa discloses a method of adjusting a frequency of a dot clock signal (Figure 3 and column 3, lines 25-45 explain the sampling clock, i.e. dot clock signal.) for a video signal, said method comprising:

- (a) generating a first dot clock based on a horizontal synchronizing frequency signal of said video signal and a first factor (Figure 3 and Column 5, lines 43-63, where the frequency dividing ration is considered as the first factor, and the sampling clock that is generated from the VCO 6 output is considered as the dot clock signal.);
- (b) sampling said video signal by said first dot clock signal to obtain image data (Column 5, lines 19-21 explain that the A/D samples the video signal by the sampling clock.);
- (c) obtaining a number of beats caused by a difference between a desirable frequency and the actual frequency of the first dot clock signal over one line of said image data (Column 4, lines 54-63, column 5, lines 27-35 and column 6, lines 9-17 explain that the counter 22 outputs a count, i.e. number of beats, indicative of the number of pixels in an effective video interval, i.e. one line of image data, and the effective video internal detector 2 detects the effective video interval and outputs a differential data indicative of the difference between the detected effective video

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interval, i.e. actual frequency, and a required video data interval, i.e. desirable frequency.);

- (d) correcting said first factor with said number of beats, thereby obtaining a second factor (Column 6, lines 53-65 where the desired adjusted frequency-dividing ration is considered as the second factor.); and
- (e) generating a second dot clock signal based on said horizontal synchronizing signal and said second factor (Column 6, lines 64 to column 7, line 7 and column 5, lines 43-53 which describe that a previous frequency-dividing ratio represented data is being applied to generate a re-adjusted frequency dividing ratio, i.e. second factor, where the sampling clock is in synchronism with the horizontal synchronizing signal.).

Onagawa fails to teach that the first factor represents a ration of a frequency of the first dot clock signal to a frequency of the horizontal synchronizing signal.

Yoshioka discloses of a scanning display with a dot clock, wherein a first factor used for generating a dot clock represents a ratio of a frequency of the dot clock to a frequency of a horizontal synchronizing signal (Column 1, line 59 to column 2, line 2 explains that the sampling clock is divided in frequency by a factor of 1/800, and further the factor defines to be correlated to the horizontal synchronization signal as 800 times the period of the dot clock pulse period.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the teaching of the factor in ration of frequency of the first dot clock to the horizontal synchronizing signal as taught by Yoshioka with the method of adjusting the frequency of a dot clock signal taught by Onagawa in order to

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provide a video signal supplying device which is capable of supplying video data while adjusting a horizontal video data interval for sampling a video signal so as to match an effective video interval, while also creating signals that are synchronized with an external signal.

Regarding claim 46, please refer to the rejection of claim 27 where the examiner understands that if Onagawa is able to perform the method of adjusting a frequency of a dot clock, then Onagawa also has means for doing so.

Allowable Subject Matter

- 6. Claim 69 is allowed.
- The following is a statement of reasons for the indication of allowable subject 7. matter:

Claim 69 is indicated allowable due to the recitation of the specific method of adjusting the frequency of a dot clock, in which the steps for carrying out a correlation analysis on the image data is specifically claimed, as with all of the other imitations added together in the claim, which are not found singularly or in combination within the prior art.

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

SUPERVISORY PATENT EXAMINER

Amy Alan Kanan

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29 September 2006